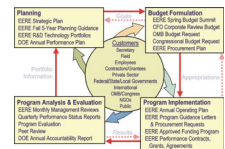
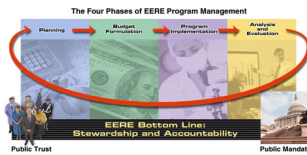




## Chapter 4 EERE Planning



### 4.1 Planning

#### 4.1.1 Levels of Planning and Plans

**Planning sets out the desired outcomes and the “stepping stones” to achieve them.**

**Plans link vertically and horizontally (crosscut).**

Comprehensive and coherent planning is a major factor leading to organizational and program success. This means that plans need to be developed and must tie together or align at all organizational levels and across multiple planning (time) horizons. The accomplishment of goals and objectives at each level should ideally aggregate seamlessly and without unnecessary redundancy to achieve the vision and mission of the organization, DOE in this case. In other words, the activities of each program and the programs within EERE, and EERE within DOE, should complement each other in contributing toward the attainment of all goals and objectives.

Planning defines the program’s future for all involved or interested parties. At the most strategic level, plans describe the program’s purpose, set out a vision, and develop broad and long-range goals to provide overall program direction. (*In general the strategic plan answers the question, “Where are we going, and why?”*). In that regard, it serves as the foundation for all other plans.

At the next level, multi-year program planning establishes mid-range goals and objectives, with identified technical, funding, and schedule requirements to serve as milestones to assess progress and guide the program along the journey. (*The relevant questions being addressed here are, “How are we going to get there, what time and resources will it take, and how will we know if we are getting there?”*)

Finally, annual operating planning is required to identify the details of program execution in the near-term, including program constituent projects and activities. Among these are technical objectives, procurement and financial assistance actions, Field assignments, budget requirements, and milestones for the year. (*The question here is, “What do we have to do to prepare for next year?”*)

These three levels are strategic planning, multi-year program planning and annual operating planning. They flow from the “out” years back to the present, and from general to specific.

In terms of the relationship of planning to the other SMS stages, planning feeds the budget formulation and directs program implementation activities. The results of analysis and evaluation at all levels provide critical inputs to current operations and future plans.

#### 4.1.2 General Planning Guidelines

To be most effective, planning at each of these levels needs to be conducted collaboratively, giving a voice in the process to those who will perform the work or receive the benefits either directly or indirectly, as well as to the various involved or interested constituencies. This openness and participation serves as a mechanism for achieving consensus and for gaining necessary support.

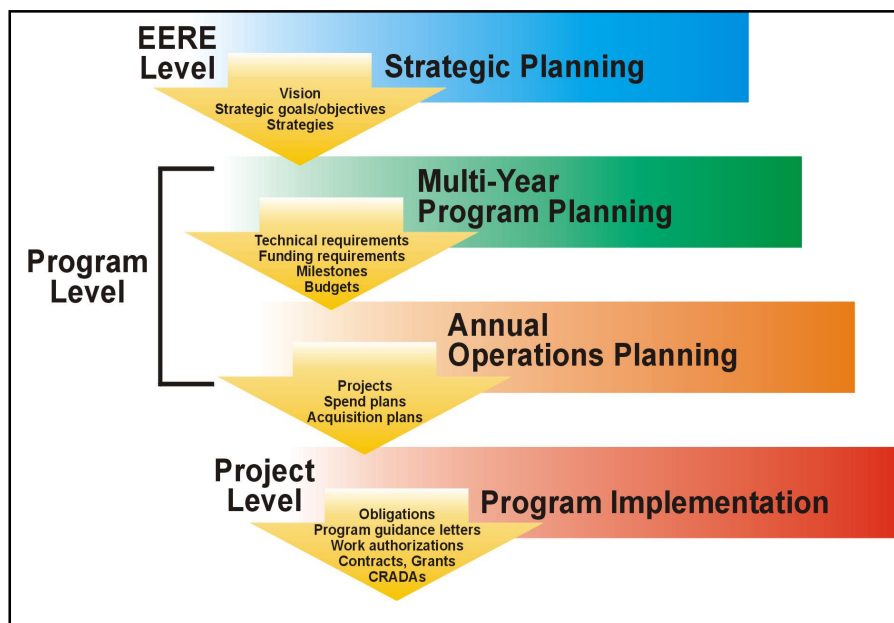
Planning should be based substantially on analysis. Of particular importance are the potential of alternative technologies or alternative paths within technologies, the relevance of the technologies and the quality of past research in the area. These need to be coupled with economic analyses to determine the cost-effectiveness and sensitivity to change of alternative strategies.

Once established, plans serve as the foundation for all other program management activities including budget formulation, implementation, and continuous program oversight and evaluation. They enable program managers and staff to make decisions and to act when issues, difficulties, or opportunities arise. It is important, therefore, that they are developed and updated in a timely way and that they are clear and coherent.

EERE has established an organizational-level planning structure and processes to develop and maintain EERE **Strategic plans, Multi-year program plans, and Annual Operating Plans**. Each of these plans has a specific purpose, content and time frame.

Strategic plans flow from the DOE level down to EERE and to the technology program offices and programs within EERE. These plans are developed based on the DOE external and internal environments and inputs from stakeholders, including the individual programs within EERE. Multi-year program

plans link the strategic goals and objectives to annual performance plans. Both multi-year and annual operating plans are developed at the program level and are aggregated up to the EERE level. See *Figure 4.1.1* below.



**Figure 4.1.1**

***Program planning is the foundation for all other program activities.***

***Goals and objectives set the long-term and mid-term targets.***

***Program managers have a set of planning roles and responsibilities.***

***Planning must be considered a teaming activity among EERE, the Program Offices, and the programs.***

EERE prepares its portion of the DOE Annual Performance plan during budget formulation as an integral element of the DOE budget request. This plan identifies key achievements or contributions to the DOE strategic goals and objectives projected for EERE programs. During program implementation, adjusted to reflect the budgets and authorization received, the EERE portion of the DOE Annual Performance plan becomes the EERE portion of the Secretary's Agreement With the President. The Agreement identifies key achievements or contributions to the DOE strategic goals and objectives projected for the upcoming fiscal year. All require information from the programs identifying projected accomplishments.

Program managers and their teams need to anticipate these inputting requirements and conduct analysis, evaluation and program level planning in advance. After EERE planning guidance has been issued, program managers have a window of time in which to prepare the planning input prior to the EERE roll-up.

Programs should always draw upon the higher-level plans in developing their own program-specific plans. Multi-year program plans should derive from strategic plans, and annual operating plans should derive from multi-year program plans. This provides coherence which facilitates budget formulation and program implementation. Therefore, planning is best accomplished as a teaming activity between the program and higher-level elements in EERE. Two important resources for program teams are EERE Strategic Plan and the OPBFA Planning Analyst. The OPBFA analyst provides the integral view of EE Corporate and Program Office goals. The OPBFA Planning Analyst also provides information and assistance and serves as the interface or liaison between the Program Offices and other EERE offices in the planning function. The OPBFA Planning Analyst serves both as an information broker and a functional expert in a manner similar to that of the OPBFA Budget Analyst.

Program planning can and should be synchronized with EERE's planning horizons and schedules by using the framework of the EERE SMS. This can be done by referring to each of the SMS Information and Instruction sheets in this guide and using the guidelines and references that they provide.

Once again, strategic planning starts at the top of the organization. Beginning with the National Energy Policy, the Department develops or updates and issues the DOE Strategic plan every three years. The Strategic plan is adjusted in the interim only if required by changes in exogenous factors, including major trends such as the price and availability of fossil fuels. EERE's Strategic plan is aligned to and supports achievement of the DOE strategic goals and objectives addressable within its operating mission, charter, domain or capability, and capacity. Program Office and program goals and objectives flow from the EERE strategic plan.

Multi-year program plans and annual operating plans flow from the projects and performers to the programs and are rolled up and aggregated at the Program EERE level.

Figure 4.1.2 shows these top-down and back-again flows. As mentioned above, plans establish the baseline for all subsequent program activity including follow-on plans. Good plans should be far-reaching and challenging as well as detailed and specific in the near term. They should inform participants and

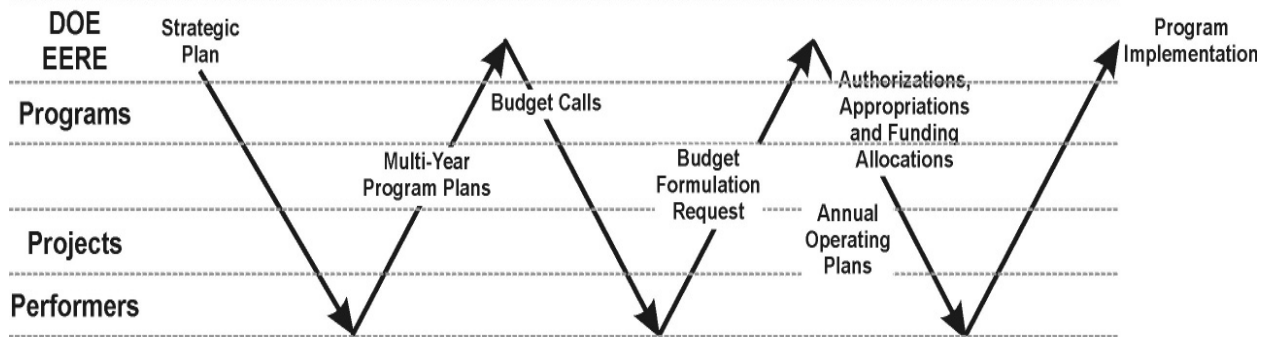


Figure 4.1.2

**Planning is conducted at four organizational levels:**

1. DOE/EERE Corporate
2. EERE Program Offices
3. Project (Field)
4. Performers

Program management teams plan the program in response to:

- Legislative authority,
- The program's needs, responsibility and mandate in support of higher level organizational goals and objectives,
- Stakeholder requirements and expectations, and
- Situational factors.

**Planning is conducted for 3 time horizons:**

- Strategic – 5 to 20 years
- Multi-year or multi-year programmatic – 2 to 5 years
- Annual/operational – 1 year

Program management teams must strive to create and promote a vision or ideal long-term future state, perhaps seven to ten years into the future. To be effective, the vision should be short, explicit and compelling. It should clarify for the reader the purpose of the program, what it aims to achieve, and why it is meaningful and worth enthusiastically pursuing.

After the purpose is clear, the program manager and his/her team should identify goals. Goals as described here mean broad, long-term (5 years or more), challenging but attainable desired outcomes. After the goals are set, strategies must be identified. Strategies are broad courses of action to achieve the goals. After the strategies are in place, objectives can be identified that fit the strategies. The objectives are mid-term milestones along the path to accomplishing the goals. They are **specific and measurable** as to what is to be accomplished in terms of schedule, cost, and technical accomplishments.

## **Additional Information**

More detailed information on processes and best practices is contained in the Appendices to this guide and in the references listed below. Each of these represent useful sources of “how to” information and should be helpful in getting started.

Strategic PM duties are spelled out in the EERE SMS Information and Instruction Sheets.

## **Appendices**

- Appendix A-1 EERE Strategic Plan
- Appendix A-2 EERE Programmatic Multi-Year Planning Guide and Outline
- Appendix A-3 Suggested Practice, Developing the Annual Operating Plan

## **References:**

- DOE Guidelines for Strategic planning  
(<http://www.cfo.doe.gov/stratmgt/SP-guide.htm>)

## 4.2 EERE SMS • Planning Stages

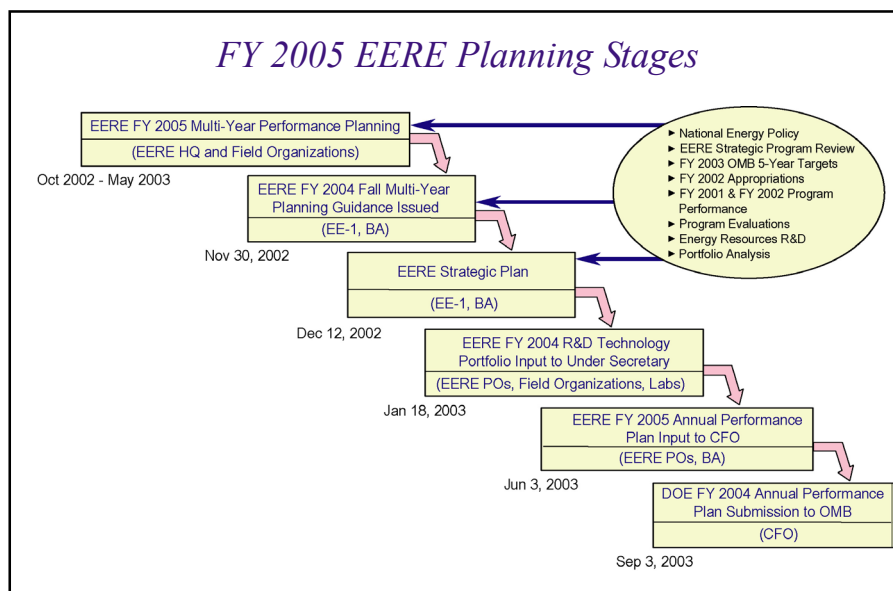
The Office of Business Administration (BA) will support EERE's long-term planning efforts by conducting market analyses that:

- Evaluate EERE's current R&D portfolio and assess alignment with current strategic objectives,
- Identify new long-term energy opportunities and challenges, and
- Identify broad R&D strategies to address long-term opportunities and challenges.

BA should ensure integration of EERE goals, objectives, and milestones during the SMS planning, budget, and program evaluation cycles.

While planning is essential at the aforementioned organizational levels and time frames, the SMS requires only a minimal number of published plans. Whenever possible, plans should be consolidated and redundancies eliminated. Plans should clearly identify their purpose and their relationship to the SMS.

Each of the steps shown in the diagram below will be described in detail in the SMS Information and Instruction Sheets that follow.







# SMS Information And Instruction Sheet

## SMS REQUIREMENT

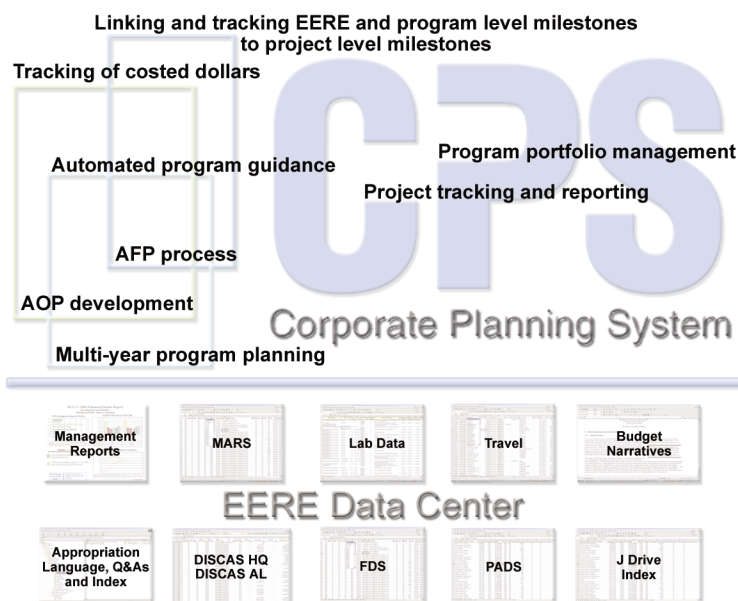
### MULTI-YEAR PERFORMANCE PLANNING

Multi-year planning bridges the gap between long-range strategic planning and annual operational planning that is based on budget appropriations. The information needed to support multi-year planning decisions includes multi-year financial levels and staffing projections and associated performance objectives and measures. This information is essential to determining annual budget and staff allocations, especially in a constrained fiscal environment. The results of multi-year planning are passed up from the Regional Offices, Field organizations, contractors, and customers to the Program Office. As this multi-year planning rolls up, the information will be consolidated in an EERE multi-year planning profile. The profile will be used to establish a framework for out-year decision-making and budget formulation. The 5 years for planning are the fiscal year under consideration and the next 4 fiscal years. It is understood that details will be less precise for the later years.

EERE Headquarters and Field Organizations

## PROGRAM MANAGEMENT ACTIONS:

Using the multi-year fall planning guidance, the program management team establishes or updates the multi-year plan at the program level. Since the information needs to be consolidated in January, the program multi-year plan input needs to be in to the DASs several weeks prior to the roll-up. A very important input to the multi-year plan is the performance, evaluation and analysis results from the most recent execution years and a review of portfolio assumptions and priorities based upon external changes.



## CPS/DATA CENTER INSTRUCTIONS:

**USES:** Refer to the applicable planning years and update the goals, milestones and projects files in the COs to record the results of the multi-year planning process.

References: "Multi-year Plan" is located at Appendix A2 of this guide.

**PLANNING**

**MULTI-YEAR PERFORMANCE PLANNING**



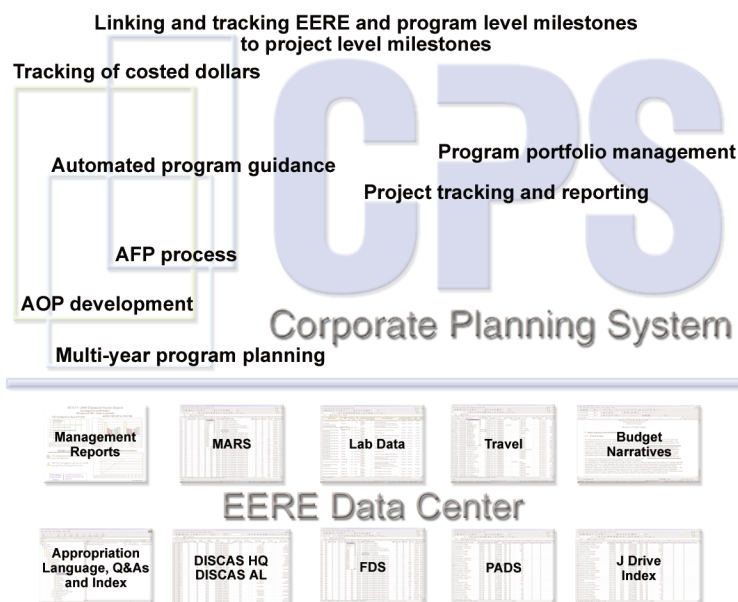
# SMS Information And Instruction Sheet

SMS REQUIREMENT
<b>EERE FALL MULTI-YEAR PLANNING GUIDANCE</b>
<p>By November 30, 2003, the Assistant Secretary will provide planning guidance to the Program Office, Regional Offices, and Golden Field Office (GFO) on budget and staffing strategies for FY 2004 to FY 2008. The Program Office, Regional Offices, and GFO will use the guidance to help formulate FY 2004 budget requests and staffing plans, including out-year projections.</p> <p>The FY 2004 Fall Multi-Year Planning Guidance will be prepared by BA from October to December 2003 on the basis of reviews of the EERE Strategic plan, the Comprehensive National Energy Policy, EERE's Strategic Program Review, FY 2003 OMB multi-year projections, FY 2002 appropriations, FY 2001 and FY 2002 program performance, program evaluations, and portfolio analysis.</p>
EE-1, BA

## PROGRAM MANAGEMENT ACTIONS:

The PM should initiate multi-year program planning prior to the issuance of the guidance to ensure adequate time to complete the planning process. The program management team should carefully read and digest the planning guidance prior to completing the multi-year planning at the program level. If completed prior to receipt of the guidance the plan should be reviewed and modified, if necessary, to comply with the guidance. This planning should yield the program's resource requirements which will be expressed in the budget requests and staffing plans.

See the program management cycle chart Figure 2.7.6 on page 2-39.



## CPS/DATA CENTER INSTRUCTIONS:

**USES:** The Data Center does not contain planning guidance information; however, the projects, goals and milestones information from prior planning iterations should be used to baseline the current planning evolution.

**INPUT REQUIREMENTS:** Changes to projects, goals and milestones should be entered in the respective Data Center spreadsheets.

References: A best practice for multi-year planning is in Appendix A2.

PLANNING	FALL MULTI-YEAR PLANNING GUIDANCE
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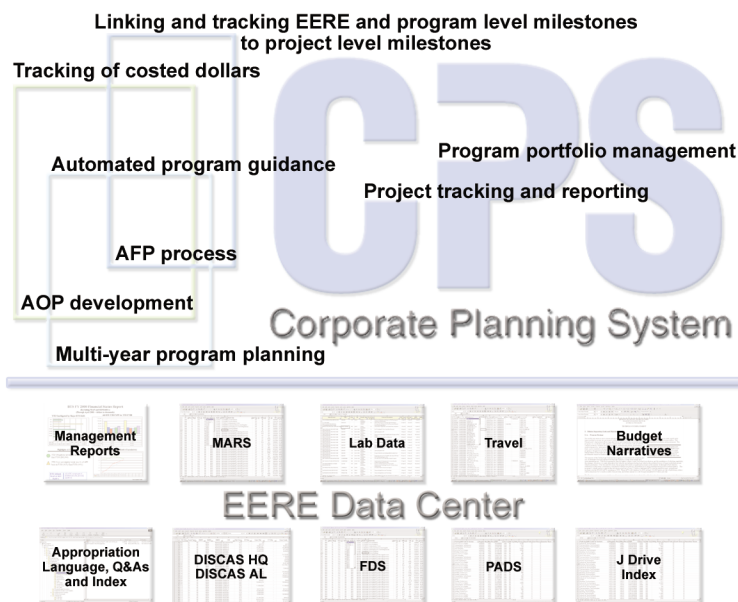


# SMS Information And Instruction Sheet

SMS REQUIREMENT
EERE STRATEGIC PLAN
<p>The EERE Strategic plan sets out EERE's business activities at the corporate level. It articulates goals, objectives, and strategies that will shape future budget requests and guide program execution. The plan also presents success indicators and metrics to be used for performance measurement and program evaluation. Inputs to the Strategic plan will include strategic planning by EERE Headquarters and Regional Offices, EERE Program Offices, and Golden Field Office; EERE Program Offices and Field organizations; Administration policies; the President's Committee of Advisors on Science and Technology; Congressional direction; the National Energy Policy; input from customers, stakeholders, and the public; EERE's Strategic Program Review; the Energy Resources R&amp;D Portfolio; program accomplishments and opportunities; DOE crosscut program plans; and other relevant information. Between August and December 2003, BA will facilitate a strategic planning process that will result in an EERE Strategic plan issued on December 12, 2003.</p>
EE-1, BA

## PROGRAM MANAGEMENT ACTIONS:

The program must align its vision, mission and goals to those of the DOE and EERE organizations. The program manager should refer to the DOE "Guidelines for Strategic planning" to understand the purpose and content of a strategic plan and then study the current DOE, EERE and Program Office strategic plans. Knowledge and understanding of these higher-level strategic plans will provide a greater awareness of the organization's vision, mission and goals so that the program management team can align its program plans to them. Additionally, if given the opportunity, the program manager should participate in the development of these higher-level strategic plans.



## CPS/DATA CENTER INSTRUCTIONS:

**USES:** EERE and Program Office goals and objectives should be reviewed prior to conducting any program planning, either multi-year or near-term operational/execution planning. Appropriation language and budget narratives may also be useful.

**INPUT REQUIREMENTS:** Goals, objectives, and milestones should be entered into the CPS.

References: The EERE Strategic plan is in Appendix A1. The DOE Strategic plan can be found at <http://strategicplan.doe.gov>. DOE Guidelines for Strategic planning are at <http://www.cfo.doe.gov/stratmg/SP-guide.htm>.

PLANNING	EERE STRATEGIC PLAN
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# SMS Information And Instruction Sheet

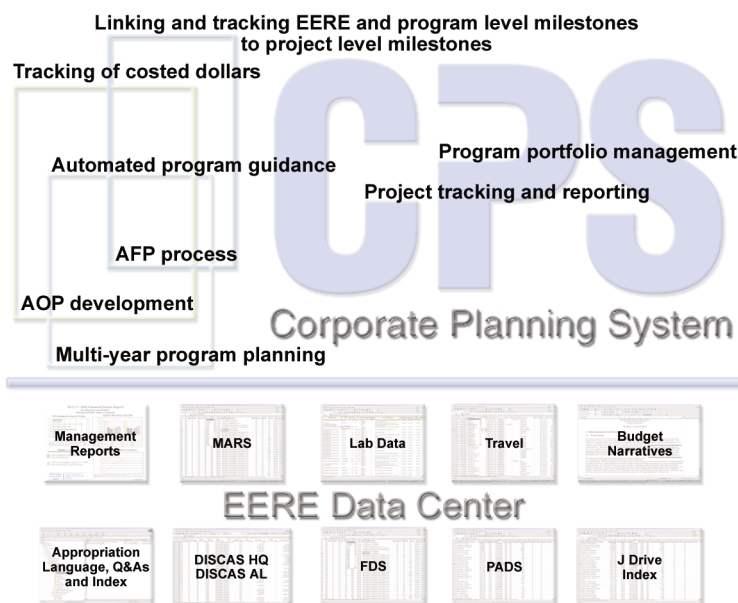
SMS REQUIREMENT
R&D TECHNOLOGY INPUT TO THE UNDERSECRETARY
<p>In 1999, the Under Secretary of Energy prepared Research and Development Portfolios for each of the Department's Mission Areas. EERE programs were included in the Energy Resources portfolio. Each year, the portfolios will be updated. By January 18, 2004, EERE will provide input in accordance with the Under Secretary's data call.</p>
EERE Program Office Field Organizations and Labs

## PROGRAM MANAGEMENT ACTIONS:

The program management team should update the R&D Technology Portfolio using the multi-year planning process. The portfolio should be aligned to the EERE strategic goals and objectives. The updated portfolio should be provided to the DAS by December 1. The technology roadmap manifests itself in the multi-year program plan, and in the projects and milestones planned over the multi-year period.

To support this step, the program management team will need data found in the budget and project file, namely:

- list of key activities
- their descriptions
- logic for doing each
- each referenced to the DOE, EERE, and program office strategic goals



## CPS/DATA CENTER INSTRUCTIONS:

**USES:** The goals, objectives, milestones and project data in the CPS can be used as a point of departure for updating the program's multi-year plan/technology roadmap.

**INPUT REQUIREMENTS:** As the technology roadmap is updated, ensure that the resultant projects, goals and objectives are entered into the CPS.

References: Multi-year program plan and the Annual Operating Plan guidance is located in Appendices A2 and A3.

PLANNING	R&D TECHNOLOGY INPUT TO THE UNDERSECRETARY
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# SMS Information And Instruction Sheet

## SMS REQUIREMENT

### EERE ANNUAL PERFORMANCE PLAN INPUT TO THE CFO

The Annual Performance Plan has been integrated into and is submitted as part of the annual budget request. GPRA requires Federal agencies to submit annual performance plans. The DOE annual performance plan states the results the Department expects to deliver for the budget resources requested. It must be closely linked to the goals contained in the Department's Strategic plan. It describes the strategies for achieving the stated goals and how the goal statement will be measured and verified. The annual performance plan accompanies the Budget Request through the OMB and Congressional reviews. Performance measures included in the performance plan will reflect performance associated with the CFO budget request level. Once Congress appropriates funds, the plan is adjusted to reflect any necessary changes. EERE's input for the FY 2006 Annual performance plan will be provided to the CFO by June 3, 2004. DOE will submit the Plan to OMB with the budget by September 3, 2004.

Between May and June 2004, BA, the Program Offices, and Regional Office Directors will support annual performance planning and ensure that the 1-year program measures for FY 2006 are practical and feasible based on the resource levels proposed in the accompanying budget submission.  
EERE, DAS's, BA

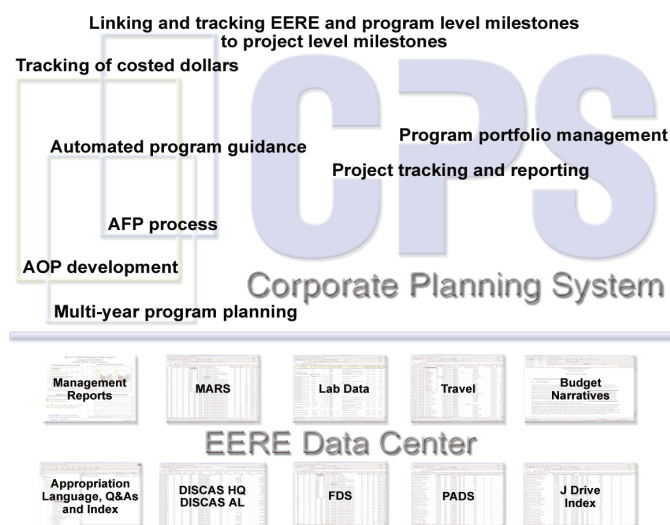
## PROGRAM MANAGEMENT ACTIONS:

The program manager should develop a draft annual operating plan using performance-based management techniques to ensure that the program's input to the EERE portions of the DOE performance plan shows intended outcomes or results and associated measures and standards. If done properly, the draft plan can easily be rolled up into the preliminary annual performance plan once Congress and the President have acted on the budget request.

## CPS/DATA CENTER INSTRUCTIONS:

**USES:** Review the program's measures and projects spreadsheets. Each will accommodate descriptive titles. If these titles are couched in results or outcome terms they can be used to represent the program's part of the overall EERE annual performance plan. The information can then be rolled up into the program office and EERE annual performance plan inputs without the need for tailoring or translation.

**INPUT REQUIREMENTS:** Ensure that the titles and dates on the project, goals and milestones data are updated prior to the roll up into the EERE required input to the Department's annual performance plan.



References: PROCESSES/BEST PRACTICES REFERENCES: "Annual Operating Plan" located in Appendix A3 of this Guide.

## PLANNING

## EERE ANNUAL PERFORMANCE PLAN INPUT TO THE CFO

